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ABSTRACT

The Language Profile of Bilingual Students in California was undertaken to determine: (1) students' range of performance on specific language tasks across four age groups in both Spanish and English; (2) the relationship of this performance to proficiency on two tests currently used in California; (3) how the development of the two languages compare; and (4) which task or combination best predicts language proficiency. The study involved 93 subjects, aged 5.0 to 9.11 years, in a transitional bilingual Spanish-English program. The language tasks assessed were sentence repetition, auditory association, story comprehension, naming in different categories, and story retelling. The study is reported in detail, including statistical data and texts of the tests used. It was found that the mean score for each task increased with age, except for hesitations and grammar errors, which were consistent across ages. Differences across languages were significant for a limited number of tasks, with better performance in English over time on tasks requiring less auditory verbal processing or paired with a visual stimulus. More tasks were significantly intercorrelated in English than in Spanish, which was attributed to the learning environments for the languages. The Language Assessment Scale currently used in the state for assessing proficiency was found to be limited in use for Spanish. Qualitative data also revealed that students used specific words reflective of their environment. Specific recommendations are made for proficiency testing based on these results, including consideration of students' stage of language development or possible loss of language, development of local norms, and followup studies. (MSE)

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LANGUAGE PROFILE OF BILINGUAL STUDENTS
(LPBS)

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PROJECT DIRECTOR

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Language Profile of Bilingual Students (LPBS)

Henriette W. Langdon
Project Director

August, 1983

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FORWARD

Language Profile of Bilingual Students (LPBS) was a project funded by the State Department of Education, Office of Special Education, from May 1982 to June 1983.

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EXECUTIVE SUMMARY

Purpose of the Study

Language Profile of Bilingual Students (LPBS) was a study undertaken to answer the following questions: (1) What is the range of performance on specific language tasks across four age groups in each language (Spanish and English) of specifically defined LEP students?; (2) How does this performance relate to degrees of proficiency found on two tests currently used in California, the LAS and BSM?; (3) How does development of one language compare with the other?; (4) Which task or combination of tasks administered best predict language proficiency?

Methodology

Ninety-three subjects ranging from 5-0 to 9-11 years of age were selected. They had the following characteristics: (1) They were native Spanish speakers of Mexican-American descent whose parents still used the language most frequently when communicating with them; (2) They were residents of two southern neighboring communities of Santa Clara County, California. They had been in the U.S. on a consistent basis for at least the past 12 months and school attendance had been at least 80% or higher; (3) They were attending a transitional bilingual program. They had no significant health problems and were performing at least in the average range academically as reported by their teacher. They had not been referred to special education because of speech, hearing, language, or learning difficulty; and, (4) They scored 80 or higher on the Columbia Mental Maturity Scale. The students were given a total of five language tasks in each language and two proficiency tests. The language tests were: Sentence Repetition, Auditory Association, Story Comprehension, Naming in different categories and Story Retelling. The two proficiency tests were the Language Assessment Scales (LAS) and the Bilingual Syntax Measure (BSM).

Findings

1. The mean for each task increased with age with the exception of number of hesitations and grammar errors which was fairly constant across ages. In general, the mean in Spanish was greater than in English or similar with the exception of a few tasks: Sentence Repetition and Naming. However, these differences were not statistically significant.

2. The average proficiency of students in Spanish is not considered to be fluent until the age of 7 using instruments such as the LAS or the BSM. Therefore, it is important not to assume that the LEP student entering school is necessarily proficient in his or her native language and this can be considered part of normal language development process.
3. The differences in means across languages were significantly correlated with age for a limited number of tasks. As the students grew older they tended to perform better in English as compared to Spanish on tasks that required less auditory verbal processing or that were paired with a visual stimulus. On more complex tasks, it was difficult to predict whether their performance was better in one or the other language based on their age.
4. There were more tasks that were significantly intercorrelated in English as compared to Spanish. This is attributed to a similar learning environment and exposure of the students in English as compared to Spanish. Some intervening factors for less predictability in Spanish performance is attributed to varying degrees of command of the language upon entering school, practice/exposure in responding to specific tasks in Spanish and, possible normal process of losing the language as a result of using the two languages, Spanish and English, in different contexts.
5. The internal reliability of the combined five language tasks in Spanish was higher than the LAS in the same language. Furthermore, the relationship between these tasks was low: only 39 percent of the variance was common to both measures. Thus, the LAS in Spanish may not be an accurate instrument in assessing the proficiency of students in Spanish. It should be used carefully and consideration should be given to use other measures as well, such as the language tests in Spanish presented in this study. However, 79 percent of the variance was common to the LAS in English and the combined five language tasks. Thus, the performance of the students in English is more predictable because of a more common knowledge of the language: it would be safe to administer either task in English. Nevertheless, it is recommended that more than one measure be used when defining the language proficiency of a student.
6. The qualitative data revealed that the students used specific words reflective of their environment.

The above data need to be interpreted with caution as they apply to a specific group of LEP (Limited-Proficiency) students. Also, some of the results may be influenced by differences in the content of some of the tasks in each language. That is, although parallel tasks in each language were chosen, they may not have been entirely equivalent.

Recommendations

1. It is suggested one assess carefully the student's language proficiency in the native language using the LAS in Spanish. Also one should consider utilizing other linguistic measures such as those proposed in this study and use these data in implementing specific bilingual ESL and transitional programs for students.
2. When assessing the linguistic proficiency of a student in his native language for the purpose of determining a possible language disability, one should consider: a) the native language may still be developing; b) the low performance may be attributed to lack of experience or exposure to some types of tasks presented; c) the student may not respond as well as a result of losing the language. Therefore, it is crucial to gather data from the parents regarding their perception of the student's linguistic skills. Also, interview the teacher to get his or her feedback and carefully review the information contained in the cumulative record.
3. Develop local norms to determine the performance level of the students in that region on specific tasks.
4. Follow-up students through longitudinal studies to assess their proficiency of the languages in specific programs using a battery of language tasks such as those used in this project.

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1. INTRODUCTION

I. Background of the Problem

Research on bilingual language development, which started at the turn of this century (Ronjat, 1913), has accelerated considerably since the early 1970's. The passage of the Bilingual Act in 1968, created to address the educational needs of language minority students in the schools, and the advent of new developments in the first language acquisition research are some of the motivating agents of this trend.

Several language proficiency tests have been developed in the last few years to classify children in groups to better meet their linguistic needs: Basic Inventory of Natural Language (BINL) (Herbert, 1977); Bilingual Syntax Measure (BSM) (Burt, Dulay and Hernández-Chávez, 1976); Language Assessment Battery (LAB) (Tilis, Weichun, and Cumbo, 1976) and Language Assessment Scales (LAS) (De Avila and Duncan, 1977), to name the most important ones. Even though their purpose is to determine the child's proficiency, the linguistic areas measured vary in each test. A further complication is the continued controversy over what is meant by "proficiency" and, for that matter, "limited proficiency" (Leeman, 1981, p. 125), and how it relates to academic performance. Nevertheless, children are often placed in specific programs based on the results of one of these tests.

At the same time, despite much progress in bilingual language research, several questions remain partially answered. These are summarized in Wode (1976, p. 103). They are: 1) Is L_2 (second language) acquired in a developmental sequence?, 2) Is there an ordered sequence of stages?, 3) Are the developmental sequences the same for L_1 (first language) and L_2 ?, 4) What are the variables governing this sequence (degree of dependence on L_1), processes and strategies to acquire L_2 , how are they similar to L_1 and are these processes universal?

The issues discussed above are complicated when a limited-English proficiency student is having difficulty acquiring the second language. There are still limited data on normal development of linguistic skills in two languages throughout the primary grades.

II. Statement of the Problem

Presently educators are faced with the decision of whether to refer a limited English proficient (LEP) student for special education evaluation. Lack

of facility with the English language and/or scholastic problems attributable to cultural differences are not considered as handicaps with respect to eligibility for special education. Some other deficits such as a language/learning disability must be defined. Although several testing materials are available to test bilingual language/learning disabled students, it is often difficult to determine the severity of the problem. Very limited data are available on normal language performance on specific language tasks in both Spanish and English for LEP students in the early primary grades. Furthermore, federal and state laws mandate non-biased assessment of LEP or bilingual students considered for possible special education placement. Language is an important component of this assessment procedure. The purpose of this study is to attempt to answer the following questions:

1. What is the range of performance on specific language tasks across four age groups in each language (Spanish and English of specifically defined LEP students?
2. How does this performance relate to degrees of proficiency found on two tests currently used in California: the LAS and BSM?
3. How does development of one language compare with the other?
4. Which task or combination of tasks administered best predict language proficiency?

Both quantitative and qualitative data will be reported in relation to specific tasks.

III. Review of the Literature

The review is divided into three parts. In the first we discuss language proficiency, in the second, a summary of bilingual language research is given and in the third, background literature regarding norms of specific language tasks is summarized.

A. Language proficiency. The term proficiency has been the subject of a great deal of controversy. As stated in McLaughlin (1981, p. 52), most bilingual individuals vary in proficiency in particular aspects of their two languages in different situations. Obtaining an idea of an individual's proficiency would require a battery that measures communications skills, taking into account the different structures used and varying contexts. This would be very time consuming.

Two of the most frequently used proficiency tests in California are the BSM and LAS mentioned previously. A thorough review on the BSM, its construction validity and reliability can be found in McCollum and Day (1981, pps. 169-175). The BSM was designed to determine the child's dominant language (Spanish or English), level of second language acquisition and degree of maintenance or loss of the first language. Upon completion of the test consisting of 20 questions which elicit specific and equivalent grammatical structures in each language using a series of seven pictures, the child is classified in one of five levels: 1) No English or Spanish; 2) Receptive in English or Spanish skills only; 3) Survival English or Spanish; 4) Intermediate skills in English or Spanish; 5) Proficient English or Spanish. The sentences are marked as correct if the structures used are grammatically correct regardless of the appropriateness in the particular context. The BSM was carried out on several groups K-2nd (Anglo-American, Chicano, Puerto Rican, Cuban and other Spanish speakers). A sample of 1603 students was used for the norms (914 in both Spanish and English, 232 in Spanish only and 457 in English). The construct validity of the BSM is based on the following assumptions: children acquire certain syntactic structures in a systematic manner through successive stages of language acquisition, based on Brown's research (1973) these sequences apply to second language as well as first language learners, but there may be some differences; children of diverse language backgrounds follow a similar pattern in learning a common second language. One of the problems with the BSM is that it relies heavily on findings of research which may not be totally applicable to L₁ research. That is, the morpheme order was initially obtained by using an elicitation method (the BSM itself) rather than from spontaneous language samples from L₂ learners. Rosansky (1975) and

Porter (1975) who applied some of these findings in their own research, found that the morpheme sequences were not always absolute. Thus, the BSM, like many other proficiency tests still lacks construct validity.

The LAS represents what the authors call "a convergent language assessment procedure". The test was normed on 308 monolingual English speakers and 105 Spanish speakers. The internal reliability testing was carried out using 295 subjects in English and 216 in Spanish. (The ages of the subjects were from 5 to 12 years.) It includes five subtests: oral production (story-retelling); phoneme discrimination (minimal pairs); phoneme production in individual words and phrases; vocabulary and oral comprehension. The combined subtests yield a composite score which represents the subject's level of oral language proficiency. The student can be classified into five categories just as on the BSM: Totally fluent (level 5); Near-fluent (level 4); Limited English or Spanish (level 3); English or Spanish with partial language deficiency (level 2) and English or Spanish with total English or Spanish deficiency or Non-English/Non-Spanish-speaking (level 1).¹ The authors report validity and reliability measures that are quite high. They indicate that academic achievement is not usually achieved until language proficiency is at least at level 4. (De Avila and Duncan, 1981). The subtests are easy to score with the exception of the Story Retelling which requires practice and understanding of expressive language skills.² Burt and Dulay (1978) list six factors that need to be considered when assessing the quality of a proficiency test. Among them are factors such as the need for distinction between quantity and quality of the student's response, the necessity of comparing a student's score with the performance of other students of the same age and amount of exposure to English and criteria of reliability and validity. McLaughlin (1981, p. 55) mentions that "it is safe to say that none of the language proficiency instruments now in use in bilingual education programs meet all these criteria".

To better define the term proficiency researchers such as Burt and Dulay (1978) and Cummins (1980) have made two important distinctions: 1) the "natural communication" task where the student communicates something to someone else (Burt and Dulay), and which Cummins calls "basic interpersonal communicative skills" (BICS), and 2) a "linguistic manipulative" task, where the student

¹ No clear definition is provided for any of these categories.

² Personal communication with personnel who have used this material. A definition for each level in Story Retelling is provided, however.

is performing the conscious linguistic manipulation required by the task (Burt and Dulay) and which Cummins names "cognitive/academic language proficiency" (CALP). Often, a student may be considered "ready" to acquire academic skills in the second language too soon based on his performance on one of the proficiency language tests mentioned. The consideration of his/her need to achieve at the minimal percentile required (36 percentile) on academic tasks in the second language is not taken into account. As Cummins indicates (1981, p. 15), it may take a second language learner up to 2 years to gain sufficient communicative skills and up to 5 or 7 years to catch up with monolingual English-speaking peers on academic-type tasks. Naturally, this varies depending on the general linguistic skills of the student in his/her own language and the amount and type of exposure to English prior to entering school. The latter point is not considered by Cummins in his discussion yet seems very important. There may also be students who are not released from bilingual programs in transitional settings because of what may be interpreted as a second language acquisition process, when in fact, it may be due to a language/learning disability.

In a recent study conducted by Dulay and Burt (1980) for the State of California, the researchers found that many children classified as LEP (Spanish background) were not necessarily more proficient in their native language. Furthermore, in many cases they were equally limited in both. One of the sources of misleading classification is the information obtained in the home language survey. A child is classified as knowing a language other than English if one of four questions is answered indicating use of a foreign language (even when the two are used in one situation considered). Their research distinguished three groups of students: primary language superior, English superior and students limited in both. Different programs for each of these groups are offered. However, in this study, there is no further breakdown by ages of the students or by the particular school programs attended. It is possible that the older the student becomes the more proficient he/she becomes in English at the "expense" of Spanish despite not yet having achieved a comparable proficiency to his/her English-speaking peers. Similarly, a student may continue being Spanish dominant because he/she has not had time to reach the needed "threshold of proficiency" (Cummins, 1980). Because of their age and type of task considered, some younger children may not appear to be yet proficient in either language. In this paper there is no indication on how that classification related to the student's academic performance in either or both languages.

It appears then that none of the tests to determine language proficiency developed so far are fully reliable. Also, none tap the two areas mentioned by Dulay and Burt, and Cummins. The BINL is the best for assessing the "basic interpersonal skills" whereas the others are more "the cognitive/academic" type. However, in a learning/academic setting, it appears that indeed a test which includes more linguistic manipulative tasks would be better in predicting success in that setting. Although there are specific guidelines for releasing a student from a transitional or bilingual program into the English mainstream, very often he/she is kept too long or not long enough in a program depending only on the score obtained on a language proficiency test.

2. Bilingual language development. Most of the literature on bilingual language development has focused on very specific grammatical structures, such as noun phrases (Dato, 1971 and 1975), plural formation (Natalicio, 1969), morphological endings (Burt and Dulay, 1973), specific syntactic structures (Garcia, 1973), mean length of utterance (Padilla and Liebman, 1975) in either the first or second language. Other studies have looked at the development of both languages: Leopold (1939-1949); Burling (1959); Mazeika (1971), Carrow (1971, 1972), Huerta (1977) and Garcia (1980), to name a few. Some generalizations based on these studies are summarized by Garcia (1981):

1. Bilingualism need not developmentally hamper the acquisition of either language.
2. The acquisition of two languages can be parallel or proceed at different rates.
3. The acquisition of two languages may result in an "inter-language", incorporating structural aspects of both languages.
4. The developmental process of each language of a bilingual is similar to that of a native speaker of either language.

There are many questions that remain unanswered, owing to differences of the subjects studied, their learning styles, their motivation to acquire the second language or to maintain the first language, and the context in which the language(s) is/are used.

3. Background literature on norms on specific language tasks. Language tests have been developed to assess ability to understand and express information presented in visual or auditory modalities in various combinations. Once collected, the information can be useful in creating remedial programs or techniques.

A child's success in achieving in school depends heavily on his/her auditory processing and expressive language skills. That is, his/her short-term memory and long-term memory skills must be intact. He/she should be able to process linguistic information via primarily short-term memory skills and derive its meaning through long-term memory skills (Wiig-Semel, 1980, pp. 283-284).

The progress in language research has prompted the release of a number of language tests in both English and Spanish. However, the majority has been on monolingual children of either language. A few exceptions are some proficiency tests previously mentioned, the Dos Amigos (Critchlow, 1974), Del Rio Language Screening Test (Toronto et al. 1975) and the Toronto Receptive Vocabulary Test (Toronto, 1977). However, all need to be interpreted with care since in many cases the number of subjects has been quite limited (25 in each group age on the Del Rio). Also, in most instances the norms only apply to particular regions where the test was developed.

At the present time specific norms in Spanish and English exist for all the tasks utilized in this research project, with the exception of the Story Retelling which was adapted in Spanish, but not for the same sample in each of the two languages. However, all need to be interpreted with care as most still lack all necessary data on reliability and validity.

2. METHODOLOGY

To answer the questions listed on p. 2 in the Introduction, the following methodology was utilized:

I. Characteristics of the Subjects

Four groups of 22 to 25 subjects each, ages 5-0 to 9-11 years of age, were selected for this study. All children were native Spanish-speakers of Mexican-American descent and met the following criteria.

- 1) On the Home Language Survey, the parents responded that Spanish was the first language spoken by the child and it was the language still most frequently used by the parents at home.
- 2) The child had no significant health problems and was performing at least in the average range academically as reported by his/her teacher. The child had not been referred to special education because of speech, hearing, language or learning difficulty.
- 3) The child had been in the U.S. on a consistent basis for at least the past 12 months and school attendance had been at least 80% or higher.¹
- 4) The child scored 80 or higher on the Columbia Mental Maturity Scale (CMMS), a measure of non-verbal intelligence (Burgemeister, Blum and Lorge, 1953 rev. 1972).

II. Process of Selection of the Final Sample

A list of students who met the first criterion (who often are identified as LEP students), was obtained from the bilingual coordinators of two southern school districts of Santa Clara County, Morgan Hill and Gilroy. Letters were sent to teachers in those schools where there were the highest numbers of such students requesting they identify who may not be eligible because of poor academic performance. Two schools in Morgan Hill and five in Gilroy participated in the study. Of the 129 students originally selected 34 had to be eliminated because the majority had moved out of the area or had failed the CMMS. There were a few students whose responses clearly indicated they could not communicate in Spanish. The final sample consisted of 93 subjects who were divided into four age groups. Table 1 lists the number of subjects in each group and the age range.

¹This criterion could not be applied to the youngest group (5-0 to 5-11) as they were mostly kindergarteners and had been in school for only approximately six months by the time the testing was initiated.

TABLE 1
AGE GROUP AND DISTRIBUTION OF THE SAMPLE

AGE GROUP	MALE	FEMALE	TOTAL
5-0 to 5-11	11	11	22
6-0 to 6-11	11	14	25
7-0 to 7-11	12	12	24
8-0 to 9-11	6	12	18
Totals	40	53	93

III. Social and Educational Background

Gilroy and Morgan Hill are two neighboring agricultural cities, supplying the nation with crops such as tomatoes, garlic, peppers and flowers. The combined school enrollment of the two communities is 15,500, representing an increase of 22 percent for Gilroy and 49 percent for Morgan Hill over the past ten years. Approximately half of Gilroy's and one fourth of Morgan Hill's student population is Hispanic (Mexican-American immigrants and their descendants). A small portion of the community is made up of migrant farm workers. The income levels of the community at large range from poor to middle-to upper-class.

Transitional bilingual programs are offered in both districts. However, there is a variety in methodologies used. In some schools and classes there is team teaching between Anglo and Spanish-speaking teachers. In others, the classroom teacher delivers the main lesson in English and an aide implements the lesson in Spanish in small groups. Still, in others there is more or less English as a Second Language instruction depending on the number of students and school resources. However, the selected sample represents each one of the educational settings mentioned above.

IV. Description of Materials Used

The four groups were given a total of five language tasks in each language and two proficiency tests. The language tasks were: Sentence Repetition, Auditory Association, Story Comprehension, Naming in Different Categories, and Story Retelling. The two proficiency tests were the Language Assessment Scales (LAS) and the Bilingual Syntax Measure (BSM).

The five language tasks were chosen because they provide information on a variety of linguistic processes which include comprehension and expression. This battery contains information on several aspects of language processing in each language and allows comparisons of language performance between groups and between the two languages. The materials are described in Table 2.

Scoring procedures as specified by the different tests were followed with a few exceptions: the Sentence Repetition subtests in Spanish was scored like the English version; for qualitative purposes, number and type of words for each subcategory in the Naming task were listed, giving information on words used by at least 20 percent of the sample for the Free Association and Things seen Outside subcategories- and, words used approximately 30 percent of the time for the Animals and Body Parts subcategories. For the LAS additional information was compiled: number of complete sentences; number of errors (morphological, syntactical or lexical); number of hesitations (pauses, word fillers such as "um", "ah", and repetition of words or phrases); number of facts reported; both the raw scores and weighted scores for each one of the five subtests were obtained. On the BSM in addition to the level and the number of correct responses, typical responses were listed.

V. Procedure

The children were tested one at a time in a quiet room at school. The complete battery of tests lasted one hour and a half, which included testing and scoring in each language. The testing was conducted by credentialed staff who were fluent speakers of the language they assessed. Approximately half of the children were tested in English first, and the other half was tested in Spanish first. No less than one week or more than three weeks elapsed between the testing in each language. The testing was completed between January and March 1983. The order of tasks presented in each language was as follows: LAS, Sentence Repetition, Auditory Association, Naming, Story Comprehension, Story Retelling and BSM.

VI. Statistical Analyses Used

The results were analyzed according to the four questions generated on p. 2. Means and standard deviations were calculated for each of the five language tasks and two proficiency tests in each language for the entire group and for each age level. Pearson's product-moment correlation coefficients were obtained to determine the degree of relation between age and the different tasks in each language as well as the relation between pairs of the various tasks administered. Correlation coefficients were calculated to determine the strength of association between age and difference in performance between Spanish and

English on the language and proficiency tasks.

T-tests were performed to determine significance of the differences between linguistic means for each task. The percentage of students who were superior in each language was reported by task.

Internal reliability scores were calculated for the Naming task, the combined five language tasks and the LAS in each language. An analysis of variance was run to determine which tasks were interrelated. Finally, a multiple regression analysis was calculated to determine the degree of relationship between the LAS and the five language tasks for each language.

AREAS TESTED, DESCRIPTION AND USE OF MATERIALS

LANGUAGE TASKS	AREA(S) TESTED	MATERIALS USED E = English S = Spanish	NATURE OF TASK
	Sentence repetition	Auditory Memory for Sentences (E)	Repeat sentences of various lengths and complexities. Appendix A and B Maximum correct in (S) and (E) = 12
		Selected Sentences from the Sentence Repetition subtest for the People Test (S)	
	Auditory association	Auditory Association of Illinois Test of Psycholinguistic Abilities (E)	Complete a statement using a verbal analogy. Appendix C Maximum correct in (S) and (E) = 40
		Same as above. From the Spanish version (S)	
	Naming	A stop watch to record the time (S) and (E)	In one minute name members of each of four categories: Free Association, Body Parts, Animals and Things Seen Outside the House. Appendix D Maximum variable in (S) and (E)
	Story comprehension	Durrell Listening Comprehension Test (E)	Respond to questions after hearing paragraphs of different lengths. Appendix E and F. Maximum correct in (S) = 30; in (E) = 29
		Story Comprehension subtest of the People Test (S)	
	Story retelling	Story Retelling subtest of McCarthy Scales (E)	Retell a story. Appendix G and H Maximum correct in (S) and (E) = 11
		Story Retelling Spanish adaptation (S)	
PROFICIENCY TESTS	Discrimination, naming word and sentence repetition and story retelling	Language Assessment Scales (E)	Discriminate sound differences in pairs of words, name pictures, repeat words and sentences, comprehend sentences and retell a story. Maximum score in (S) and (E) = 5
		Language Assessment Scales (S)	
	Morphology and Syntax	Bilingual Syntax Measure (E)	Answer questions about pictures presented. Maximum score in (S) and (E) = 5
		Bilingual Syntax Measure (S)	

3. FINDINGS

The following findings need to be interpreted with caution as they apply to a specific group of LEP students. Also, some of the results may be influenced by differences in the content of some of the tasks in each language. That is, although parallel tasks in each language were chosen, they may not have been entirely equivalent.

The findings will be reviewed according to the statistical analyses used.

I. Means of Scores for the Language and Proficiency Tasks

The means for all tasks in each language for the whole group and each age level are presented in Figures 1 to 5. Appendix I contains the values of means and standard deviations.

The mean for each task and language increased with age with the exception of number of hesitations and grammar errors, which was fairly constant across ages. In general, the mean in Spanish was greater than in English or similar with the exception of a few tasks: Sentence Repetition and Naming. However these differences were not statistically significant. Refer to Appendix I.

Contrary to what may be expected, the students' linguistic proficiency between the ages of 5-0 and 6-11 was below what may be considered "Near-fluent" or "Fluent" in Spanish according to the LAS. On the BSM the ratings were slightly higher, but not considered "Proficient" below age of 7-0. It is not till the age of 7-0 that the students were considered to be "Near-fluent" or "Fluent" in their first language. This indicates that students whose primary language is Spanish are not always proficient in their own language upon entering school. It may take them up to 2 years to be considered fully proficient in their first language according to the criteria of the LAS or BSM. Also, as many as 3 to 4 years may be required for them to become fully proficient in English (Appendix I). In addition, the LAS and BSM yielded similar results. The above findings were on a limited sample, but they confirm some previous hypotheses and findings: students who are limited in English are not necessarily proficient in Spanish, especially at younger ages. This is not surprising as language ability continues to develop beyond the age of five into the school years (Menyuk, 1977). Also, they confirm earlier comments regarding the time it takes students to become proficient in a second language: that is, at least 2 years if not more (Cummins, 1980 and 1981, Burt and Dulay, 1980).

FIGURE 1

MEANS OF SCORES FOR THE LANGUAGE AND PROFICIENCY TASKS
FOR THE WHOLE GROUP

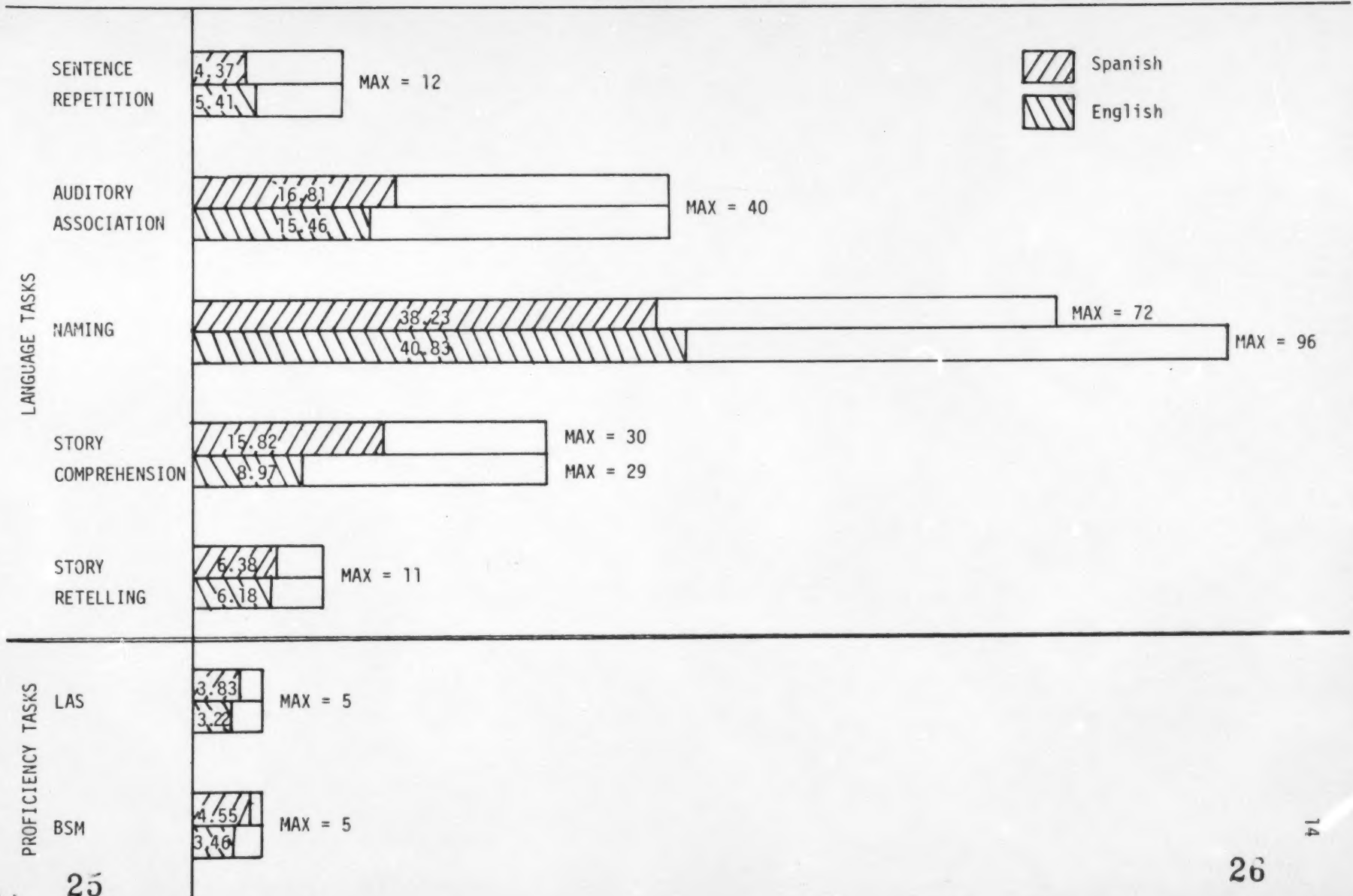


FIGURE 2

MEANS OF SCORES FOR THE LANGUAGE AND PROFICIENCY TASKS
FOR STUDENTS AGES 5-0 TO 5-11

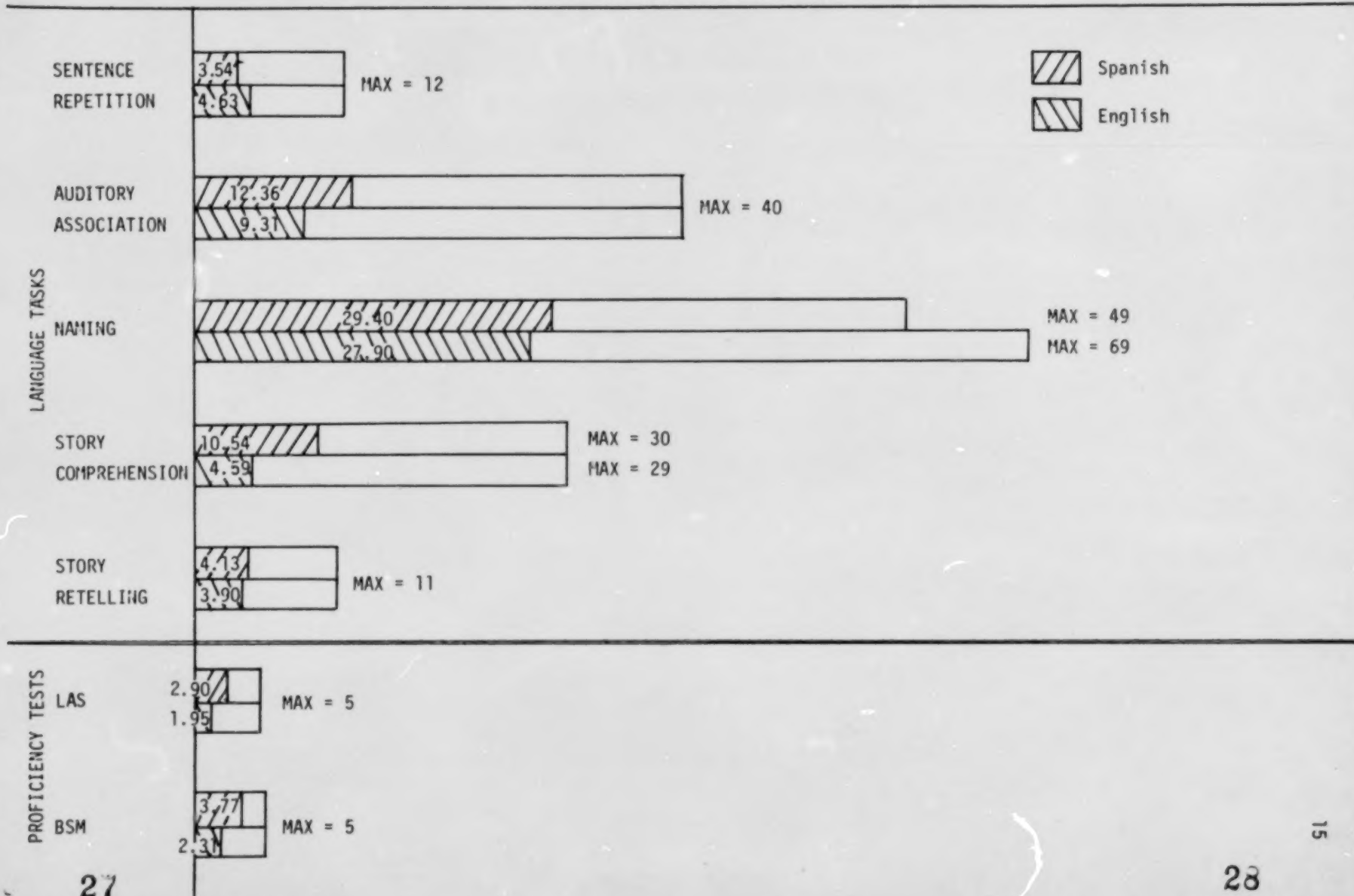


FIGURE 3

MEANS OF SCORES FOR THE LANGUAGE AND PROFICIENCY TASKS
FOR STUDENTS AGES 6.0 TO 6.11

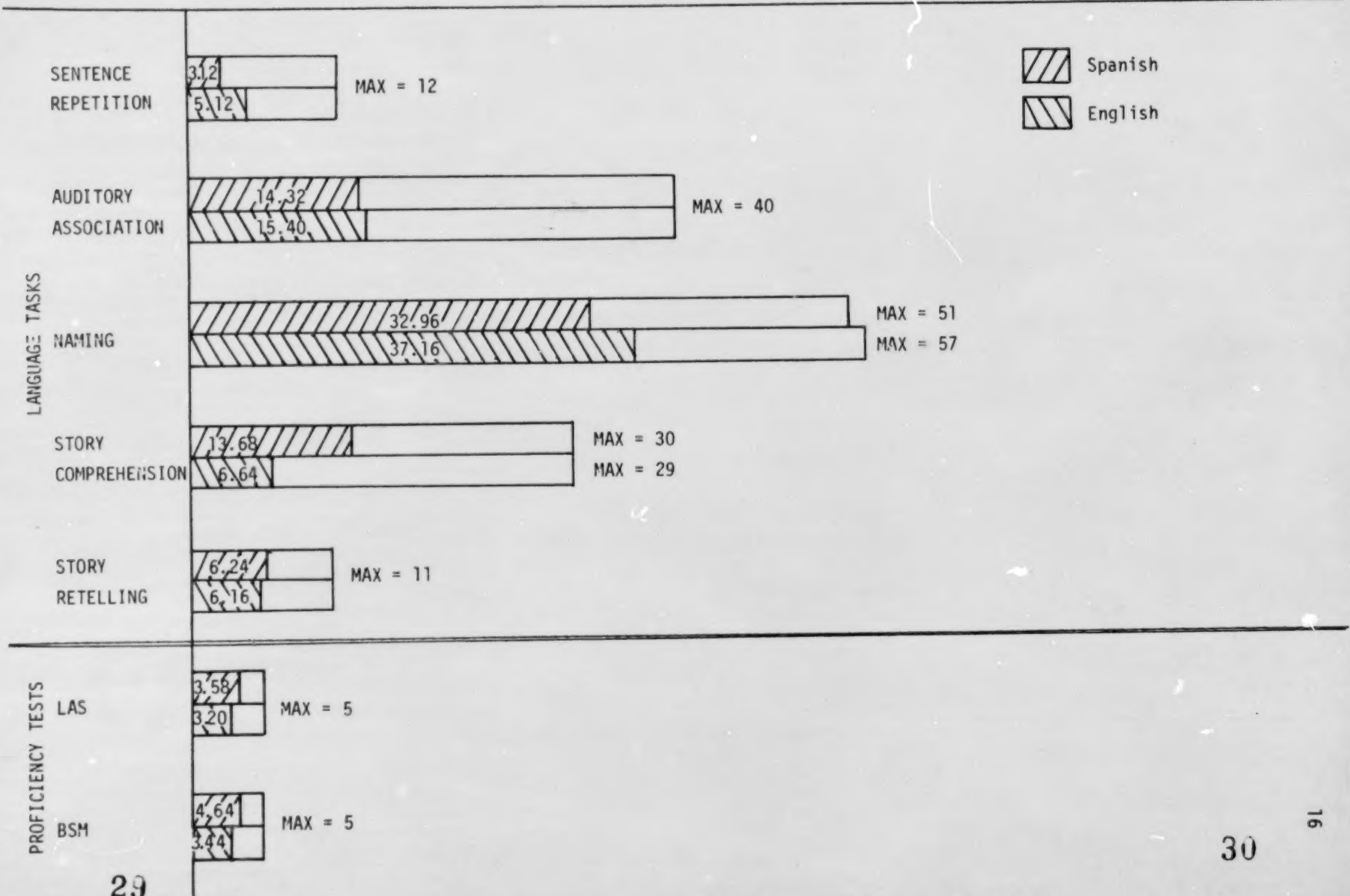


FIGURE 4

MEANS OF SCORES FOR THE LANGUAGE AND PROFICIENCY TASKS
FOR STUDENTS AGES 7.0 TO 7.11

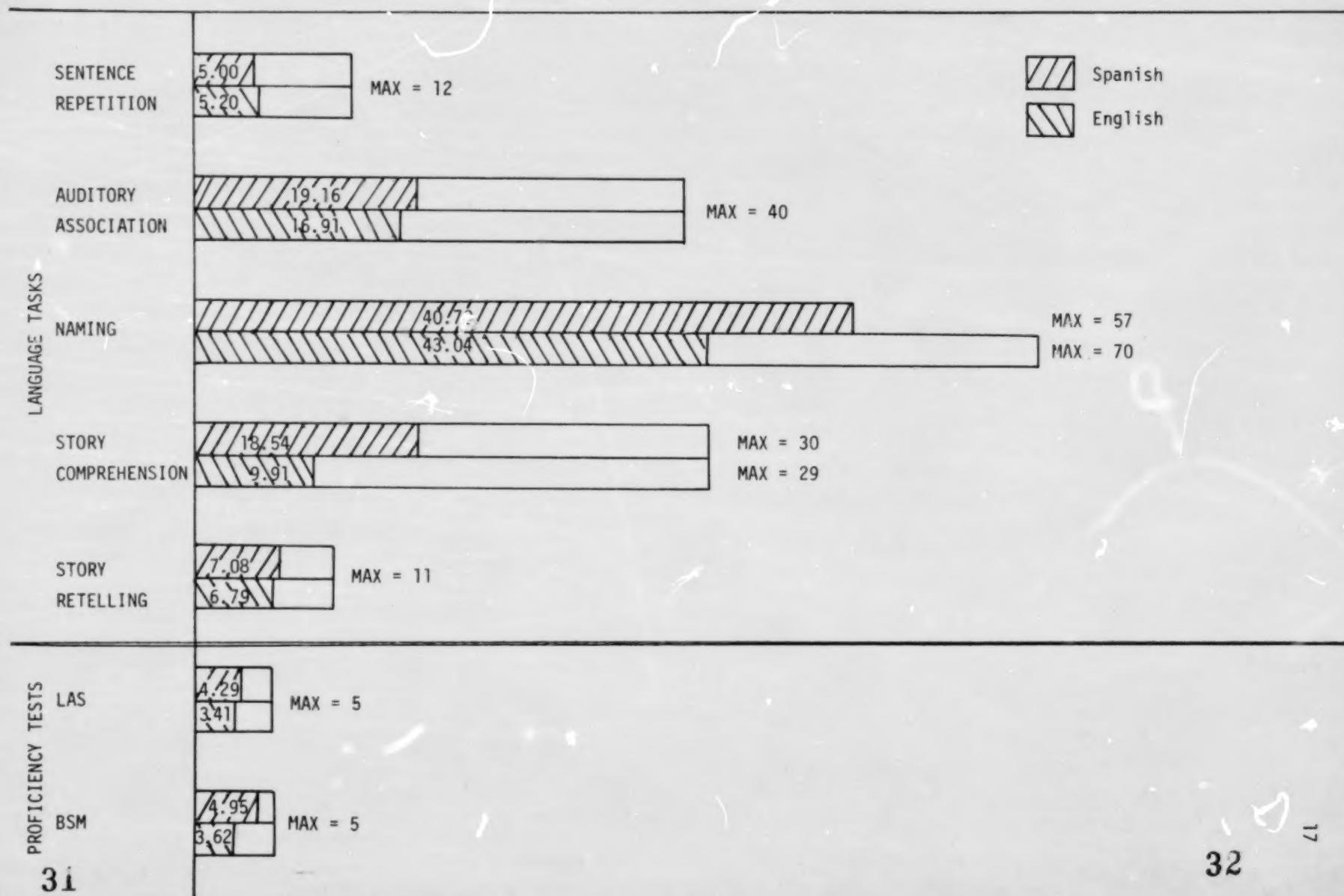
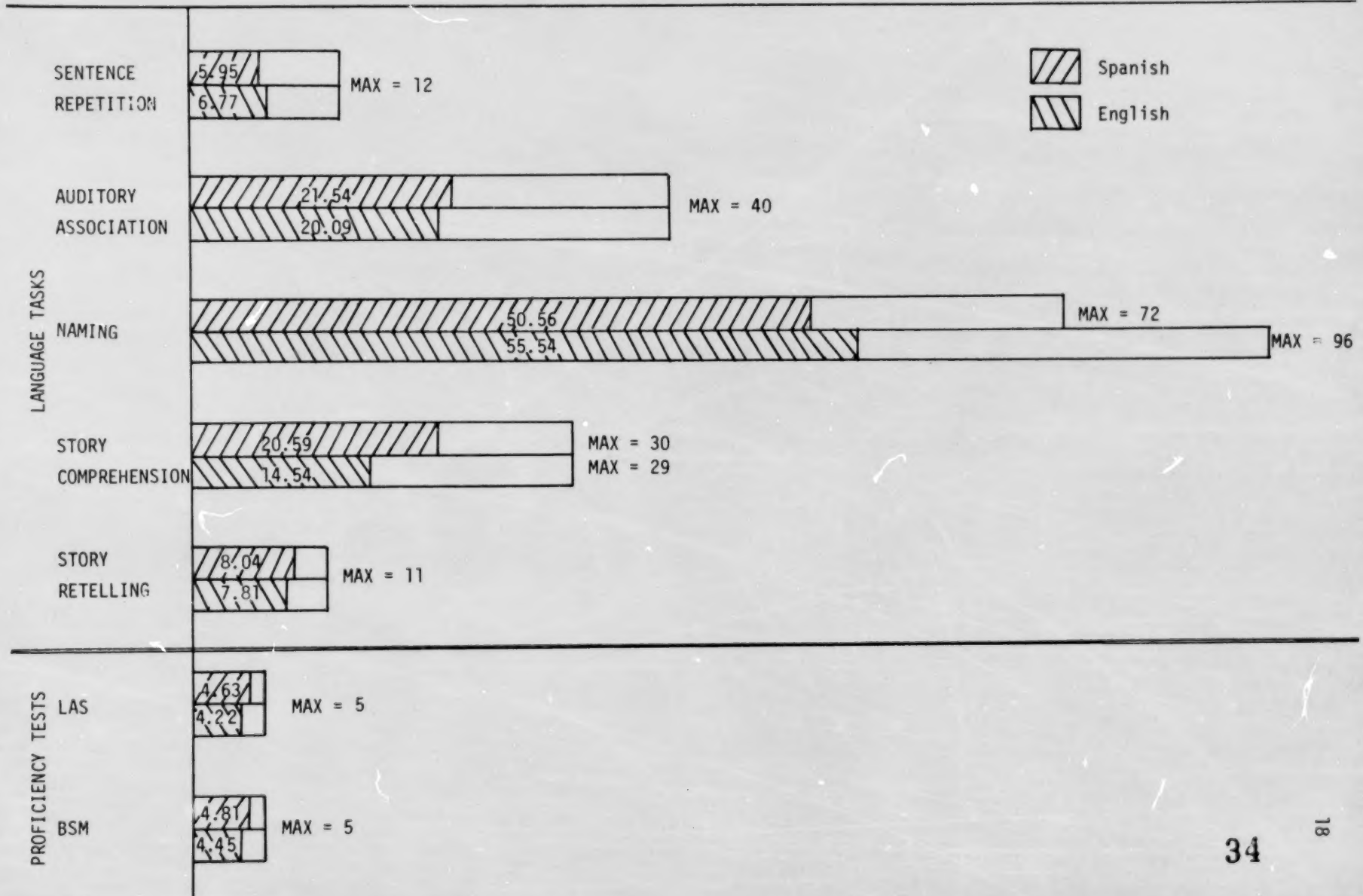


FIGURE 5

MEANS OF SCORES FOR THE LANGUAGE AND PROFICIENCY TASKS
FOR STUDENTS AGES 8.0 TO 9.11



II. Relation Between Selected Variables and Language

Correlation coefficients were calculated to determine the degree of relation between pairs of selected variables and language. For example, age was correlated with the different language and proficiency tasks in each language, also subtests of the LAS and the different language tasks were correlated. Table 3 lists correlations which were .50 or higher ($p < 0.001$) in each language.

There were many more pairs of tasks that correlated significantly in English as compared to Spanish. This is attributed to more common knowledge of English by the students; they have learned it primarily in school using similar methods, whereas their knowledge of Spanish seems more diverse. Also, very likely, they are more used to being tested and responding to formal tasks in English as compared to Spanish, especially in the lower grades. This may be in part the reason for lower performance on proficiency tasks in Spanish and other tasks, such as repetition of what they hear in retelling stories. Auditory Association and Naming correlated well with other tasks in both languages. Thus, if the number of tasks were to be reduced, these would be useful in determining linguistic skills of children in each language. Of special interest was that in both languages, the LAS correlated with the BSM, number of questions answered correctly on the BSM, Auditory Association, Naming and Story Retelling.

III. Relationship Between Age and Difference on Performance Between Languages

To determine if the performance between languages on the different language tasks and proficiency tests varied with age, correlations were calculated between the performance in Spanish and English for each task and age. Table 4 lists those correlations which were significant ($p \leq 0.05$). In all cases the relationship had a negative value. This indicates that the relationship was significant in favor of English. That is, as the students grew older they performed significantly better on the particular tasks in English such as: Discrimination, Lexical Items, Phonemes, Story Retelling on the LAS. The greatest relationship was for the questions on the BSM. However, this relationship was not significant for any of the five language tasks except Naming. Thus, one could not predict based on age, which tasks would be better performed in which language. There may be several reasons: both the LAS and BSM require that the student respond to verbal input with the use of pictures which aids in recall. Therefore, the performance on specific linguistic tasks which require more complex auditory processing skills yields more diverse results (Sentence Repetition, Auditory Association, Story Comprehension, Story Retelling as no visual stimuli are presented in these cases). Also, the students may have been in the process of

TABLE 3
CORRELATION COEFFICIENTS BETWEEN SELECTED
VARIABLES AND LANGUAGE

VARIABLE	LANGUAGE	
	SPANISH	ENGLISH
Age	*LAS General level 0.59 *Animals 0.62 *Naming 0.67 Story comprehension 0.63	*LAS General level 0.62 *Animals 0.66 *Naming 0.69 Auditory association 0.69
Lexical (LAS)	Auditory association 0.63	Phonemes 0.67 Comprehension 0.62 Story (LAS) 0.65 BSM level 0.67 BSM (Questions) 0.78 Animals 0.61 Story retelling 0.62
Phonemes (LAS)	Story (LAS) 0.61	BSM (Questions) 0.63 Auditory association 0.66 Body parts 0.62 Naming 0.62
Comp. (LAS)		BSM level 0.68 BSM (Questions) 0.70 Auditory association 0.65
Story Level (LAS)	*Sentence repetition 0.63 *Auditory association 0.62 Story comprehension 0.66	Number sentences 0.72 Facts 0.63 BSM level 0.66 BSM (Questions) 0.70 *Sentence repetition 0.63 *Auditory association 0.75 Naming 0.62 Story retelling 0.68
Sentences Used (LAS)		Facts 0.71 General level 0.69
General LAS Level	*BSM (level) 0.58 *BSM (Questions) 0.62 Sentence repetition 0.66 *Auditory association 0.68 *Animals 0.66 *Naming 0.63 Story comprehension 0.72 *Story retelling 0.59	*BSM level 0.75 *BSM (Questions) 0.78 *Auditory association 0.81 *Animals 0.64 *Naming 0.69 *Story retelling 0.71

TABLE 3 (Continued)

CORRELATION COEFFICIENTS BETWEEN SELECTED
VARIABLES AND LANGUAGE

VARIABLE	LANGUAGE	
	SPANISH	ENGLISH
BSM level		Auditory association 0.72 Naming 0.60
BSM (Questions)		Auditory association 0.81 Sentence repetition 0.66 Naming 0.65 Story retelling 0.63
Sentence Repetition	*Auditory association 0.58	*Auditory association 0.60 Naming 0.60
Auditory Association	Story comprehension 0.72 *Naming 0.59	Animals 0.61 *Naming 0.68 Body parts 0.62 Story retelling 0.66
Naming	Story comprehension 0.6606	Story retelling 0.58
Story Comprehension	Story retelling 0.5851	

Legend *Tasks correlated in both languages.

TABLE 4

RELATIONSHIP BETWEEN AGE AND DIFFERENCE IN
PERFORMANCE BETWEEN LANGUAGES

TASK	AGE
X Discrimination (LAS)	-0.18*
X Lexical (LAS)	-0.18*
X Phonemes (LAS)	-0.24**
X Story Retelling (LAS)	-0.18**
X General total score (LAS)	-0.22**
X BSM level	-0.30**
X BSM questions	-0.32***
X Naming	-0.22**

Legend X difference in languages

* $p \leq 0.05$

** $p \leq 0.01$

*** $p \leq 0.001$

losing certain skills in their native language as a result of lack of use of the language while still acquiring higher linguistic skills in the second language (Merino, 1976). Thus, there would be no significant difference on those tasks between the two languages. Finally, the tasks presented in this project may not be totally equivalent across languages and this could also have an influence.

IV. Relative Superiority of the Group's Performance in Spanish and English by Task

To analyze the performance on specific language tasks, percentages of students performing equally well, better in Spanish or English (score of ± 1 on each task) were derived. These results are presented in Table 5. As can be noted the performance was not always equivalent in each language. There was variation depending on the task considered. For example, slightly over half of the students performed equally well on discriminating pairs of sounds in both languages whereas most of the other half did better in Spanish than English. A similar tendency was noted for other subtests of the LAS where more students performed better in Spanish than English. Approximately 50 percent of the students achieved higher on the LAS and BSM in Spanish, with another 30 to 40 percent who did equally well in both languages (within a particular level). It was also interesting that there was a greater percentage of students who repeated sentences better in English or equally well in both languages as compared to Spanish. This would indicate that the task of repeating is often easier for the students in English and may reflect the influence of schooling. There was a higher percentage of students who responded to the Auditory Association task better in Spanish or English as compared to both languages. This may reflect they can retrieve words and process specific information in one or the other language as compared to both. There was a greater percentage of students who named more animals and body parts in English than Spanish. This may also be a reflection of instruction. However, in general, there was a greater number of students in the group whose naming abilities were better in Spanish than English. There was a similar breakdown of students who performed equally well, better in English or Spanish on Story Retelling reflecting no systematic tendency on this task. Interestingly, there were more students who performed better in Spanish than English on the LAS Story Retelling. It could be that the pictures of the LAS may have aided in recall. The above findings illustrate the diverse language performance of LEP students in each language.

TABLE 5
RELATIVE SUPERIORITY OF THE GROUP'S PERFORMANCE
IN SPANISH AND ENGLISH BY TASK (N=93)

TASK	APPROXIMATELY EQUAL	BETTER IN	
		SPANISH	ENGLISH
Discrimination (LAS)	52.6%	40.9%	6.5%
Lexical (LAS)	50.6%	16.1%	33.3%
Phonemes (LAS)	61.3%	31.2%	7.5%
Comprehension (LAS)	45.2%	51.6%	3.2%
Story Retelling (LAS)	37.6%	40.9%	21.5%
General level (LAS)	29.0%	55.9%	15.1%
General level (BSM)	40.9%	53.9%	6.5%
Sentence Repetition	37.6%	19.4%	43.0%
Auditory Association	15.2%	54.8%	30.0%
Free Association	22.6%	37.6%	39.8%
Animals	21.5%	28.0%	50.5%
Body parts	28.0%	24.7%	47.3%
Things seen outside	30.1%	32.3%	37.6%
Naming	9.7%	54.8%	30.0%
Story Retelling	30.1%	33.3%	36.6%

Note:

Story comprehension could not be compared because scoring procedure was different.

V. Internal Reliability Coefficients for Selected Measures

To determine the relationship of each item within a task to the total task, internal reliability coefficients were calculated for the Naming, combined five language tasks and the LAS in Spanish and English. The results are reported in Table 6. There was a stronger relationship among the combined five language tasks in both languages with Spanish being somewhat stronger. Thus, there is more consistency among the combined five language tasks in Spanish as compared to English. Of interest is the fact that the internal reliability on the LAS in Spanish was the lowest. This would indicate that it may not be a very reliable instrument when assessing the proficiency of students in Spanish. In contrast, the combined five language tasks in Spanish would be reliable in obtaining a performance on specific linguistic areas. In contrast, the LAS in English had the highest reliability.

VI. Factor Analysis Matrix

Table 7 illustrates the number of tasks that were interrelated between the different subtests of the LAS and the combined five language tasks in each language. There were fewer tasks on the LAS that related to the five language tasks in Spanish as compared with English. Thus, more tasks were similar between themselves in English than Spanish.

VII. Multiple Correlation Coefficients

Multiple correlation coefficients were calculated to determine the variance common to the LAS and the combined five language tasks. This is reported in Table 8. It was higher between the LAS (taking raw scores) for the combined five language tasks in English as compared to Spanish. That is, 79 percent of the variance was common to the language tasks on the LAS in English as compared to 39 percent in Spanish. The combination of the five language tasks in English may be used interchangeably with the LAS. The administration time is equivalent to the LAS and is easier to score. However, the LAS Story Retelling lends itself to a number of interpretations which contributes to raise or lower the general proficiency level since this task is heavily weighted.

TABLE 6
INTERNAL RELIABILITY COEFFICIENTS
FOR SELECTED MEASURES

TASK	RELIABILITY COEFFICIENTS
Naming (Spanish)	0.78
Naming (English)	0.81
Combined five language tasks (Spanish)	0.78
Combined five language tasks (English)	0.70
LAS (Spanish)	0.69
LAS (English)	0.84

TABLE 7

FACTOR ANALYSIS MATRIX

	Spanish	English
Discrimination (LAS)	0.14	0.62*
Lexical (LAS)	0.62*	0.62*
Phonemes (LAS)	0.33	0.79*
Comprehension (LAS)	0.44	0.46
Story level (LAS)	0.40	0.55*
Sentence Repetition	0.27	0.25
Auditory Association	0.65*	0.63*
Naming	0.58*	0.57*
Story Comprehension	0.68*	0.18
Story Retelling	0.54*	0.52*

*Indicates greatest relationship

TABLE 8

MULTIPLE CORRELATION COEFFICIENTS

VARIABLES	MULTIPLE R	R ²
LAS and COMBINED FIVE LANGUAGE TASKS (Spanish)	0.62	0.38
LAS and COMBINED FIVE LANGUAGE TASKS (English)	0.89	0.79

VIII. Description of Qualitative Data

Appendix J lists the nouns most frequently named in each category by the whole group in each language. For the Free Association subtest there were 390 different words named in Spanish as compared to 365 in English. The first three subcategories which were house, school and food related were most frequently named by the group in each language. An equivalent number of different words were used for school related items, more names were given for house related items in Spanish as compared to more in English for foods. There were differences with the other subcategories: more names were used for people and clothes in Spanish (33 vs. 18 and 27 vs. 14 respectively) whereas more animals and body parts were named in English in contrast to Spanish (38 vs. 27 and 20 vs. 13 respectively). Four words were the most frequently named ones by the group in each language but the rank order was different (book-chair-table and house). Paper and box were named much more frequently in Spanish as compared to cat and dog in English. It is interesting that the group named more foods in English than in Spanish. However, it is not surprising that they had more vocabulary words for people and clothing in Spanish as these categories relate more to the home environment. The group named more body parts and animals in English than in Spanish. This may be resulting from teaching.

Eighty six different animal names were given in Spanish as compared to 88 in English. The same 6 animals were named most frequently in both languages but the rank order differed with the exception of dog which had the first rank in each language. Vaca/cow was more frequently named in Spanish and monkey in English.

Fifty six different words for body parts were used in Spanish and 55 in English. The same 8 body parts were most frequently used in both languages but the rank order differed. Nariz/nose was the most frequently named body part

in each language. Mano/hand was the second most frequently named body part in Spanish as compared to English where eyes was second. Hand was below the 9 most frequently named body parts in English whereas ojo/eye was the fourth most frequently named body part in Spanish. Ear was named more frequently in English than Spanish. In that language it was named below the 9 most frequently named body parts. In Spanish both words patas and pies were used by the children to denote feet. Older children used pies more frequently than patas. Thus, the majority of words most frequently named in both languages were related to the senses or main parts of the body (head-feet/legs). The fact that hand was more frequently named in Spanish and eye as well as ear in English may be reflective of how children get to know their world. It may be possible that children from certain linguistic backgrounds know their world more by touching and experiencing with their hands (Spanish) as compared to looking and hearing (English).

A total of 182 words in Spanish and 164 in English were used to name items seen outside. Five of the 6 nouns were the same for the most frequently used words in each language. The rank order was the same for the first three items: cars, trees and houses. Niños/children was the fourth most frequently used in Spanish but not named at all as frequently in English. The words most frequently used in both languages trees, houses, cars, grass, flowers summarize the environment where these children live: a semi-urban setting with a climate that allows the growth and maintenance of grass, flowers and trees. Possibly if these children lived in the city the words most frequently named would be different.

Appendix K lists some interesting/unusual answers to the questions on the BSM. One can note that the students seemed more at ease in their first language as compared to English: there was more variation in responses to this task which is open ended, in Spanish.

4. CONCLUSIONS-RECOMMENDATIONS

1. The mean for each task and language increased with age with the exception of number of hesitations and grammar errors, which was fairly constant across ages. In general, the mean in Spanish was greater than in English or similar with the exception of a few tasks: Sentence Repetition and Naming. However, these differences were not statistically significant.

2. The average proficiency of students in Spanish is not considered to be "fluent" until the age of 7 using instruments such as the LAS or BSM. Although most proficiency tests lack several of the factors mentioned on p. 4 in the Introduction, in this study it was found that the average proficiency of students younger than 7 was not considered fluent in their first language. This has important pedagogical implications. It reinforces some of the basic philosophies of bilingual education - continue the development of the native language while the second language is introduced. Recent research indicates that such programming can be successful in developing both languages in the student (Legarreta-Marcada, 1981). Often the student may not even be tested in his/her primary language. Assumptions are made that he/she is proficient in the native language, or this issue is neglected altogether when designing programs for the LEP student (Vásquez, 1983; Dulay and Burt, 1980).

3. The differences in means across languages were significantly correlated with age for a limited number of tasks. As the students grew older, their performance on tasks which either required limited processing of auditory information or verbal expression (discrimination-repetition of single words and short sentences, naming) or where the information was paired with visual stimuli Lexical Items (LAS), Story Retelling (LAS), (BSM) was greater in English. However, on other tasks which required greater auditory processing skills, the difference between languages was not correlated with age. This would indicate that one can better predict the students' performance in a language on tasks which require less auditory/verbal processing. That is, the more complex the task is the less it is possible to predict the students' performance. The rate of development in each language for a particular task should be taken into account in the process of assessing the language performance of students.

4. There were more tasks that were significantly intercorrelated in English as compared to Spanish. This indicates that it is easier to predict the students' performance in English as compared to Spanish. They have for the most part learned the second language in a similar environment, whereas their knowledge of Spanish is more disparate. There may also be other intervening factors: lack of practice in responding to some type of tasks in Spanish (repeating information - retelling stories without pictures) which are learned in school as opposed to at home. In addition, some of the students may be losing the language, especially in specific programs such as transitional ones, where the language is used less and less as they learn English. This factor has great importance when assessing the student's language proficiency/competence through other language tasks to determine the possibility of a language disorder.

5. The internal reliability of the Combined Five language tasks in Spanish was higher than the LAS in the same language. Furthermore the relationship between these tasks was low. The opposite was found for English. The LAS in Spanish may not be as accurate an instrument in assessing the proficiency of students in Spanish. Most of the weight of the test is given to the Story Retelling subtest, which may be difficult for younger students regardless of their command of the language. Using a combination of the five language tasks would provide better information about the student's language performance. Also, it is easier to score. However, the performance of the students in English is more predictable because of a more common knowledge of the language. Thus, it would be safe to administer either task in English. Furthermore, administering the Auditory Association alone or counting questions correctly answered on the BSM would be good measures to obtain an idea of the student's proficiency in either language. However, one test alone is seldom recommended as it provides information on a discrete segment of language. In this case the LAS would be preferable to the Combined five language tasks in English because of the greater internal reliability (Cronbach Alpha for the LAS in English: 0.84 in contrast of 0.70 for the five language tasks in English). However, the lower reliability of the Combined language tasks in English may be attributed to the nature of the tasks. In this case, the five language tasks with the exception of Naming require more complex auditory processing skills. These may be attained more slowly in the children learning the new language. In contrast,

in Spanish, the value for the five language tasks was greater because the children possess a better command of the language.

6. The qualitative data revealed that the students were using many words which were reflective of their environment. For example, they used similar amount of words to name school items in both languages, but in Spanish more for house items, clothes, people and foods, as opposed to in English body parts and animals. Also, some of the words they used more frequently in one language or the other reflected the way they viewed their world through that language. For example, they used mano/hand much more often in Spanish and more often eye and ear in English. These findings need to be considered when determining the vocabulary of students: if they don't know a word in a language it does not mean they do not know it in the other. It is sometimes difficult to find an individual who possesses the same vocabulary in two languages.

Some of the recommendations of this study which should be considered exploratory in nature are:

1. It is suggested one assess carefully the student's language proficiency in the native language using the LAS in Spanish. Also one should consider utilizing other linguistic measures such as those proposed in this study and use these data in implementing specific bilingual ESL and transitional programs for students.
2. When assessing the linguistic proficiency of a student in his native language for the purpose of determining a possible language disability, one should consider: a) the native language may still be developing; b) the low performance may be attributed to lack of experience or exposure to some types of tasks presented; c) the student may not respond as well as a result of losing the language. Therefore, it is crucial to gather data from the parents regarding their perception of the student's linguistic skills by asking questions such as those proposed in Appendix L. Also, interview the teacher to get his or her feedback and carefully review the information contained in the cumulative record.
3. Develop local norms to determine the performance level of the students in that region on specific tasks.
4. Follow-up students through longitudinal studies to assess their proficiency of the languages in specific programs using a battery of language tasks such as those used in this project.

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APPENDICES

APPENDIX A

SENTENCE REPETITION

Procedure: If a child hesitates, urge him to try by asking him to "say it".
For a younger child training may be necessary. Say: ("I am
a big girl/boy")
DO NOT REPEAT THE SENTENCES. Give each sentence only once.

Stop further testing after THREE CONSECUTIVE FAILURES.

Scoring: Misarticulations and contractions DO NOT count as errors.
Omissions, substitutions or additions of words are errors.
Changes in word form or word order are also errors. The test
score is the number of sentences repeated without errors.

For qualitative interpretations, the child's responses should
be transcribed.

Score: _____

ENGLISH

1. I went downtown.
2. Mama is in the car.
3. I am going home.
4. I went outside to pick some flowers.
5. We are going to buy some candy.
6. Jack likes to feed the little puppies.
7. Jane wants to build a big castle in her playhouse.
8. Tom has lots of fun playing ball with his sister.
9. Mama asked Nancy to bring the brown dog into the house.
10. Fred asked his father to take him to see the clowns in the circus.
11. Billy has made a beautiful boat out of wood with his sharp knife.
12. Mama bought Susie a chocolate ice cream cone after the movie yesterday.

APPENDIX B

SENTENCE REPETITION

Procedure: If a child hesitates, urge him to try by asking him to "say it". For a younger child training may be necessary. Say: "Dime lo que te diga yo: Soy un/a niño/a grande".

DO NOT REPEAT THE SENTENCES. Give each sentence only once.

Stop further testing after THREE CONSECUTIVE FAILURES.

Scoring: Misarticulations and contractions DO NOT count as errors. Omissions, substitutions or additions of words are errors. Changes in word form or word order are also errors. The test score is the number of sentences repeated without errors.

For qualitative interpretations, the child's responses should be transcribed.

Score: _____

SPANISH

1. Vamos a misa los domingos.
2. La niña ha comprado pan y leche.
3. Es peligroso caminar en el hielo.
4. Quítate los zapatos antes de acostarte.
5. La tienda donde compré el pan y el queso es grande.
6. Es posible que Juan llegue más tarde que los otros niños.
7. Mamá necesitaba un cuchillo y Pepe le dio el suyo.
8. Carmen no quiere salir a trabajar mientras tenga niños jóvenes.
9. María está triste hoy porque sus amigos no vinieron a jugar.
10. El hombre seguirá buscando a su amigo aunque le cueste una fortuna.
11. A mí no me gustan los plátanos, pero sí me gustan las naranjas y las nueces.
12. La semana pasada fuimos al cine a ver una película de misterio.

APPENDIX C

AUDITORY ASSOCIATION

Procedure: Read each analogy pausing to indicate that a response at the end of the sentence is required.

Training: A daddy is big, a baby is.....
 A baby is little (small), a daddy is.....
 Un papá es grande, un bebé es.....
 Un bebé es pequeño (chiquito), un papá es.....

Scoring: Follow procedures of ITPA.

Discontinue after three consecutive failures.

Transcribe all answers:

Language: English (ITPA) _____ Spanish (ITPA) _____

Score: _____

- | | | | |
|-----------|-----------|-----------|-----------|
| 1. _____ | 11. _____ | 21. _____ | 31. _____ |
| 2. _____ | 12. _____ | 22. _____ | 32. _____ |
| 3. _____ | 13. _____ | 23. _____ | 33. _____ |
| 4. _____ | 14. _____ | 24. _____ | 34. _____ |
| 5. _____ | 15. _____ | 25. _____ | 35. _____ |
| 6. _____ | 16. _____ | 26. _____ | 36. _____ |
| 7. _____ | 17. _____ | 27. _____ | 37. _____ |
| 8. _____ | 18. _____ | 28. _____ | 38. _____ |
| 9. _____ | 19. _____ | 29. _____ | 39. _____ |
| 10. _____ | 20. _____ | 30. _____ | 40. _____ |

APPENDIX D

CATEGORIZATION

Procedure: The examiner asks the child to say as many words as possible within a certain category during ONE MINUTE.

Scoring: Transcribe each answer. Each correct answer is one point.

No credit is given to repetition of words.

If the child uses phrases or sentences - only one point for each.

Only one point per word - if the word is used in the plural or any derivative of the word is used no POINTS are given (cat-cats or foot-feet).

Language: English _____ Spanish: _____

Categories: Free: _____ Parts of the body: _____

Animals: _____ Objects seen outside the house: _____

FREE ASSOCIATIONPARTS OF THE BODYANIMALSOBJECTS SEEN OUTSIDE THE HOUSE

APPENDIX E

STORY COMPREHENSION

Procedure: Announce that a story is going to be read on which questions will be asked. Introduce a story with title. Discontinue if child has missed more than 2 questions in a story. TRANSCRIBE ALL ANSWERS.

Scoring: Assign one point for each question answered correctly.

Score: _____

1. The Cat and the Dog

A boy had a big gray cat. He was going to give her some milk. She did not come when he called. He saw her up a tree looking down at a big dog. The boy sent the dog away. Then the cat jumped down from the tree and came for her milk.

Grade 1 Reading Level (The Cat and the Dog)

- _____ 1. What did the boy have?
- _____ 2. What was he going to give her?
- _____ 3. What happened when he called to her?
- _____ 4. Where was the cat?
- _____ 5. What was she doing?
- _____ 6. What did the boy do then?
- _____ 7. What happened next?

2. Dick's Birthday Present

Dick jumped out of bed and ran downstairs. It was his birthday. He found a big basket on his chair at the table. Something was moving in the basket. Dick took off the cover. Out jumped a little brown dog. The dog started to bark and wag his tail. He was glad to get out.

Grade 2 Reading Level (Dick's Birthday Present)

- _____ 1. What did Dick do when he woke up?
- _____ 2. What day was it?
- _____ 3. What did he find on his chair?
- _____ 4. What did Dick hear?
- _____ 5. What did Dick do then?
- _____ 6. What was in the basket?
- _____ 7. What did the dog do?

APPENDIX E (Cont'd.)

STORY COMPREHENSION (Continued)3. The Accident

A boy was hurt on our street yesterday. He had been playing ball and was riding his bicycle away from the ball field when a car came down the road. He did not see the car coming because he was looking back at the boys who were still playing ball. The car was going slowly. It hit the boy, but did not run over him. His arm was hurt and his bicycle was bent.

Grade 3 Reading Level (The Accident)

- _____ 1. What was this story about?
- _____ 2. What had the boy been doing?
- _____ 3. What was he riding?
- _____ 4. What came down the road?
- _____ 5. Why didn't he see the car coming?
- _____ 6. How fast was the car going?
- _____ 7. What happened to the boy?
- _____ 8. What happened to the bicycle?

4. Peter Cooper's Engine

Peter Cooper built one of the first railroad engines in the United States. It was used to pull cars from a city to a town thirteen miles away. No one thought that the engine could do this. In August in the year 1930, it was hooked to a car packed full of people. It went at a speed of eighteen miles an hour and made the trip in forty-eight minutes. People were surprised that anyone could breathe while going so fast.

Grade 4 Reading Level (Peter Cooper's Engine)

- _____ 1. What did Peter Cooper build?
- _____ 2. What was it used for?
- _____ 3. How far away was the town?
- _____ 4. What was the engine hooked to?
- _____ 5. How fast did it go?
- _____ 6. How long did the trip take?
- _____ 7. What surprised the people?

APPENDIX F

STORY COMPREHENSION

Procedure: Read the stories in the People Manual and follow the same instructions. Discontinue the story when the child has missed all questions on two consecutive stories. TRANSCRIBE ALL ANSWERS

Scoring: Assign one point for each question answered correctly.

Score: _____

A. Benito...

1. _____

2. _____

B. Un niño...

1. _____

2. _____

3. _____

C. Había una vez...

1. _____

2. _____

3. _____

4. _____

5. _____

D. Un gran perro...

1. _____

2. _____

3. _____

4. _____

E. María...

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

F. Pedro...

1. _____

2. _____

3. _____

4. _____

5. _____

G. Un día...

1. _____

2. _____

3. _____

4. _____

5. _____

APPENDIX G

ELICITED LANGUAGE SAMPLE/STORY RETELLING

Procedure: Read the story below slowly and clearly. Say:

I AM GOING TO READ YOU A LITTLE STORY. LISTEN CAREFULLY AND WE WILL SEE HOW WELL YOU CAN TELL IT BACK TO ME. YOU DON'T HAVE TO TELL IT BACK TO ME WORD-FOR-WORD. JUST TELL ME THE STORY AS WELL AS YOU CAN.

ENGLISH

One day after school Bob was walking to the store. On the way, he saw a woman carrying some letters to a mailbox. Suddenly, the wind blew the woman's letters into the street. Bob shouted, "I'll get them for you". He looked both ways and saw that there were no cars coming. He ran into the street and picked up all the letters. The woman was very happy to get her letters back. She thanked Bob for being such a kind and helpful boy.

TAPE THE CHILD'S STORY.

TRANSCRIBE THE STORY FROM THE TAPE RECORDER.

Scoring: See next page.

Score: _____ (maximum is 11 points)

APPENDIX H

ELICITED LANGUAGE SAMPLE /STORY RETELLING

Procedure: Read the story below slowly and clearly. Say:

VOY A LEERTE UN CUENTO. ESCUCHA CON MUCHO CUIDADO. LUEGO
ME LO VAS A CONTAR A MI. NO ME LO TIENES QUE DECIR IGUALITO SOLO
DIMELO COMO MEJOR TE ACUERDES.

SPANISH

Una tarde Rosa se quedó en su casa en vez de ir afuera a jugar con sus amigas. Su mamá estaba preparando la cena. De repente oyó a su mamá pegando un grito fuerte. Se había cortado el dedo con un cuchillo filoso. Rosa prontito corrió a la cocina. Le limpió el dedo con alcohol y algodón y le puso una curita. Su mamá le dio un abrazo. Cuando llegó su papá en la noche su mamá le contó cómo le había ayudado y los dos se sintieron muy orgullosos de Rosa.

TAPE THE CHILD'S STORY.

TRANSCRIBE THE STORY FROM THE TAPE RECORDER.

Scoring: See next page.

Score: _____ (maximum is 11 points)

APPENDIX H (Cont'd.)

1. Palabra usada para Rosa

- 1 punto para Rosa, niña, muchacha, ella o cualquier nombre que sea de niña.
 0 puntos para señor, señora, él, niño o nombre de niño

2. Palabra usada para mamá

- 1 punto para mamá, señora, la mamá de Rosa o Sra:
 0 puntos para señor, persona, niña

3. Palabra usada para dedo

- 1 punto para dedo o mano
 0 puntos para brazo

4. Se quedó en la casa

- 1 punto indicando que estaba en su casa, que no había salido a jugar con sus amigos/as, que estaba jugando sola
 0 puntos si dice que no estaba en su casa, que había ido a jugar con sus amigos/as, que estaba con su mamá en la cocina.

5. Preparando la cena

- 1 punto indicando que su mamá estaba preparando alguna comida cena
 0 puntos si dice que estaba platicando con ella o haciendo otra cosa que no sea el cocinar algo

6. Se había cortado el dedo

- 1 punto indicando que su mamá se había cortado o lastimado el dedo o la mano
 0 puntos si no indica que la mamá de Rosa se había lastimado de alguna manera

7. Rosa corrió a la cocina

- 1 punto indicando que Rosa fue a ver a su mamá a la cocina
 0 puntos si no indica que Rosa fue la cocina o a ver lo que le había pasado a su mamá

8. Cómo la curó

- 1 punto indicando cómo la curó (aunque no sea con todo el detalle pero deben haber algunos puntos del cuento. Si dice que le puso una banda no es exacto)
 0 puntos si no da ninguna explicación de cómo la curó.

APPENDIX H (Cont'd.)

9. Lo que hizo su mamá para demostrarle su agradecimiento

- 1 punto indicando cómo le demostró su agradecimiento (dándole un abrazo)
0 puntos si no indica cómo le demostró su agradecimiento.

10. El hecho que la mamá le contó al papá lo que había pasado

- 1 punto indicando que la mamá le había contado al papá lo que había pasado
0 puntos si no lo indica de alguna manera.

11. Como se sintieron los papás de Rosa

- 1 punto si indica como estaban los papás de Rosa: contentos, orgullosos etc.
0 puntos si no lo indica de alguna forma que sea aproximada

APPENDIX I

MEANS AND STANDARD DEVIATION OF GROUP BY AGE ON EACH TASK AND LANGUAGE

TASK			GROUP		5-0 to 5-11		6-0 to 6-11		7-0 to 7-11		8-0 to 9-11	
			Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
DISCRIMINATION LAS	Raw Score	S	26.29	4.54	22.77	6.30	26.44	3.06	27.08	3.95	28.77	1.65
		E	23.49	4.53	18.63	4.47	24.48	3.39	24.25	3.51	26.40	2.82
	Weighted Score	S	10.96	1.8	9.50	2.62	11.02	1.28	11.30	1.64	12.00	0.68
		E	9.78	1.89	7.77	1.87	10.16	1.44	10.10	1.46	11.02	1.17
LEXICAL ITEMS LAS	S		15.61	2.35	14.59	2.21	14.96	2.49	16.29	2.31	16.63	1.81
	E		15.94	3.42	12.86	3.39	16.00	2.87	17.08	2.37	17.72	3.07
LEXICAL ITEMS LAS*	S		9.59	1.67	8.41	1.81	9.36	1.56	10.17	1.44	10.40	1.13
	E		9.98	2.13	8.05	2.11	10.02	1.79	10.69	1.49	11.09	1.91
PHONEMES LAS	S		32.13	3.86	30.27	4.58	30.64	4.52	33.54	1.99	34.18	1.89
	E		28.69	7.19	21.18	7.83	30.60	7.18	30.16	3.07	32.45	3.90
PHONEMES LAS*	S		11.16	1.34	10.51	1.59	10.64	1.57	11.64	0.71	11.88	0.66
	E		10.03	2.31	7.35	2.71	10.89	1.58	10.46	1.06	11.26	1.36
COMPREHENSION LAS	S		8.83	1.36	7.86	1.55	8.36	1.35	9.29	0.95	9.86	0.35
	E		7.30	1.56	6.27	1.35	7.08	1.46	7.25	1.25	8.63	1.29
COMPREHENSION LAS*	S		11.06	1.70	9.85	1.94	10.47	1.68	11.63	1.17	12.33	0.42
	E		9.15	1.95	7.86	1.69	8.87	1.83	9.08	1.57	10.82	1.60
STORY LEVEL LAS	S		3.58	0.82	3.04	0.65	3.32	0.74	3.95	0.75	4.00	0.75
	E		3.31	0.97	2.54	0.96	3.32	0.90	3.33	0.63	4.04	0.84
STORY LEVEL LAS*	S		35.80	8.11	30.45	6.53	33.60	7.57	39.16	7.17	40.00	7.55
	E		33.11	9.77	25.45	9.62	33.20	9.00	33.33	6.37	40.45	8.43
NUMBER SENTENCES IN STORY	S		9.91	3.16	8.31	2.35	8.76	2.91	10.79	2.94	11.86	3.13
	E		9.55	4.68	5.45	3.71	9.28	4.26	10.50	3.10	12.95	4.48
HESITATIONS IN STORY	S		5.50	3.58	5.31	3.73	5.84	4.06	5.54	3.51	5.27	3.13
	E		1.44	2.14	1.13	1.50	1.40	1.82	1.50	1.84	1.72	3.16

MEANS AND STANDARD DEVIATION OF GROUP BY AGE ON EACH TASK AND LANGUAGE (Cont'd.)

TASK		GROUP		5-0 to 5-11		6-0 to 6-11		7-0 to 7-11		8-0 to 9-11	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
NUMBER OF ERRORS	S	1.64	1.90	2.31	1.86	1.64	2.39	1.45	1.35	1.18	1.78
	E	3.22	2.85	2.86	2.45	2.92	2.84	4.41	3.32	2.63	2.47
NUMBER OF FACTS	S	8.58	1.26	8.0	1.51	8.60	1.19	9.04	1.23	8.63	0.90
	E	8.07	1.90	6.9	2.26	7.84	1.92	9.04	0.99	8.45	1.65
GENERAL LEVEL LAS	S	3.83	1.06	2.90	0.81	3.58	1.0	4.29	0.85	4.63	0.65
	E	3.22	1.28	1.95	1.04	3.2	1.13	3.41	0.92	4.22	0.97
GENERAL LEVEL LAS*	S	77.63	13.55	68.74	8.86	75.10	10.03	80.17	17.18	80.62	9.12
	E	72.07	15.38	56.50	14.89	73.14	11.81	73.70	8.25	84.65	12.48
BSM LEVEL	S	4.55	0.98	3.77	1.41	4.64	0.86	4.95	0.20	4.81	0.66
	E	3.46	1.40	2.31	0.99	3.44	1.35	3.62	1.34	4.45	1.05
QUESTIONS ON BSM	S	15.49	2.84	13.77	2.81	15.32	3.38	16.29	1.68	16.54	2.52
	E	11.86	4.73	8.22	4.34	11.36	4.93	12.79	3.14	15.04	3.86
SENTENCE REPETITION	S	4.37	2.79	3.54	2.72	3.12	2.71	5.0	2.12	5.95	2.78
	E	5.41	1.96	4.63	1.73	5.12	1.71	5.20	1.53	6.77	2.28
AUDITORY ASSOCIATION	S	16.81	6.79	12.36	6.16	14.32	5.45	19.16	6.07	21.54	5.65
	E	15.46	6.11	9.31	5.12	15.40	4.97	16.91	3.85	20.09	5.34
FREE ASSOCIATION	S	12.64	5.12	9.68	2.91	10.52	4.31	13.54	4.92	17.04	4.77
	E	13.23	6.28	10.00	5.21	12.04	3.92	12.45	5.94	18.68	6.72
ANIMALS	S	7.82	3.38	5.31	1.91	6.48	3.05	8.83	2.47	10.77	3.19
	E	8.40	3.82	5.09	2.75	7.44	2.29	9.08	2.50	12.09	4.01
BODY PARTS	S	9.24	2.80	7.45	2.21	8.80	2.29	9.37	2.65	11.40	2.71
	E	10.35	4.42	6.18	3.94	9.88	3.04	12.33	3.98	12.90	3.54
THINGS SEEN OUTSIDE	S	8.60	3.49	6.86	3.82	7.16	2.59	9.37	3.04	11.13	2.83
	E	8.64	3.64	6.09	3.77	7.80	2.36	9.16	3.25	11.59	2.95

APPENDIX I

MEANS AND STANDARD DEVIATION OF GROUP BY AGE ON EACH TASK AND LANGUAGE (Cont'd.)

TASK		GROUP		5-0 to 5-11		6-0 to 6-11		7-0 to 7-11		8-0 to 9-11	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
NAMING	S	38.23	11.67	29.40	7.00	32.96	9.57	40.70	8.49	50.56	9.40
	E	40.83	14.99	27.90	12.95	37.16	8.46	43.04	10.90	55.54	13.47
STORY COMPREHENSION	S	15.82	6.09	10.54	4.37	13.68	4.05	18.54	5.02	20.59	5.48
	E	8.87	8.53	4.59	4.73	6.64	6.81	9.91	8.55	14.54	10.15
STORY RETELLING	S	6.38	2.48	4.13	1.35	6.24	2.58	7.08	2.08	8.04	2.03
	E	6.18	2.87	3.90	3.35	6.16	2.79	6.79	1.61	7.81	2.13

Legend

*Raw score

1st line: Spanish

2nd line: English

APPENDIX J

TYPES OF WORDS USED ON THE NAMING IN DIFFERENT CATEGORIESFREE ASSOCIATION:

Number of words used

Spanish - 390

English - 365

Subcategory in rank order

Subcategory in rank order

Spanish	# of words
House related	(58)
School related	(41)
Foods	(34)
People	(33)
Animals	(27)
Clothes	(27)
Verbs	(21)
Adjectives	(14)
Body parts	(13)

English	# of words
House related	(49)
School related	(43)
Foods	(43)
Animals	(38)
Body parts	(20)
Verbs	(20)
People	(18)
Clothes	(14)
Adjectives	(12)

Words used by at least 20%
of the sample in rank order.Words used by at least 20%
of the sample in rank order.

Spanish	
Word	# times occurring
*Libros	(57)
*Silla	(37)
Papel	(32)
Caja	(30)
*Mesa	(30)
*Casa	(26)
Radio	(26)
Puerta	(24)
Reloj	(22)

English	
Word	# times occurring
Dog	(39)
*Book	(36)
Cat	(32)
*Table	(28)
*Chair	(24)
*House	(23)

*common word for both groups

ANIMALS

Number of words used: 86

Number of words used: 88

Spanish	
Word	# times occurring
Perro	(55)
Gato	(47)
Caballo	(43)
Elefante	(38)
**Vaca	(35)
Leon	(31)

English	
Word	# times occurring
Dog	(56)
Elephant	(53)
Cat	(48)
Horse	(35)
**Monkey	(32)
Lion	(31)

Words named by at least 30% of the sample
**different word from rest

(Continued)

APPENDIX J

TYPES OF WORDS USED ON THE NAMING IN DIFFERENT CATEGORIES (Cont'd.)BODY PARTS:

Number of words used: 56		Number of words used: 55	
Spanish		English	
Word	# times occurring	Word	# times occurring
**Mano	(74)	Eyes	(80)
Nariz	(74)	Nose	(72)
Patas/pies	(71)	Mouth	(62)
Ojos	(69)	Foot/feet	(55)
Boca	(69)	Head	(54)
Cabeza	(57)	Hair	(52)
Dedos	(47)	**Ear	(52)
Pelo/cabello	(46)	Finger	(51)
Piernas	(42)	Leg	(40)

Words named by at least 30% of the sample
 **different word from rest

THINGS SEEN OUTSIDE THE CHILD'S HOUSE:

Number of words used: 182		Number of words used: 164	
Spanish		English	
Word	# times occurring	Word	# times occurring
Carros	(62)	Cars	(54)
Arboles	(50)	Trees	(46)
Casas	(42)	Houses	(42)
**Niños	(37)	Grass	(41)
Zacate	(32)	Dog	(32)
Perros	(25)	Flowers	(31)
Flores	(22)		

Words named by at least 20% of the sample
 **different word from rest

APPENDIX K

TYPES OF RESPONSES ON THE BSMSPANISH

PLATE 1

- ¿Qué va a hacer con esto (mamá dando el gusano a los pajaritos)? (4)
 Se lo va a calentar
 Lo va a partir en tres pedazos
 Les va a dar a sus bebecitos la comida que les trajo a la boca
 Se lo va a dar a sus hijos

PLATE 3

- ¿Por qué? (hombre lavan lo el piso de un barco) (13)
 Porque no quiere que su barco esté sucio
 Porque los pescaditos le echaron agua
 Porque quiere que quede limpio
 Porque le cayó agua de los pescados
 Porque los peces estan echándole agua a su barco
 Para que se vea bonito

- ¿Qué hizo con los zapatos (14)
 Los puso en una parte para que no se mojara con jabón
 Los guardó para cuando acabe

PLATE 4

- ¿Por qué? (la niña está contenta) (18)
 Porque está bailando como la Samba
 Porque es un buen día
 Porque está casada o algo
 Porque está el sol
 Porque tiene un vestido nuevo
 Porque va a ver a su abuelita

PLATE 5

- ¿Qué quiere el perro que haga el rey? (21)
 Que se voltee
 Que agarre otras manzana para que el perro se pueda comer el guajolote
 Que voltee para comerse toda la comida
 Que no mire lo que está haciendo
 Que le dé manzanas el cocinero
 Que no vea para que él coma la comida que el rey tiene en su plato
 Que se fije para allá

APPENDIX K

TYPES OF RESPONSES ON THE BSM (Cont'd.)

PLATE 5 (Cont'd.)

¿Qué hubiera pasado si el perro no se hubiera comido la comida? (24)

No se enojaba el rey

Se moría

El rey se la hubiera comido y no hubiera pasado nada

La comida todavía estaría en el plato

El rey se la comía

El rey le daba la comida

El rey no estuviera tan triste

Estuviera la comida todavía allí

El rey no se hubiera asustado

ENGLISH

PLATE 1

Why do they want food? (3)

Because they are crying for food

Because they are real little and they need food

So they can grow

PLATE 3

Why do you think their eyes are closed? (fish swimming) (14)

Because they are babies

They don't want to see those fishes

Why do you think their eyes are open? (15)

Because they are playing around. If they shut them they couldn't see

They are joyful

They want to see where they are going

PLATE 5

What would have happened if the dog hadn't eaten the food? (23)

The king would be eating it right now

He would have been hungry

The king would be happy and give some to the dog

LIST OF IMPORTANT FACTS TO GATHER WHEN CONSIDERING A LEP STUDENT FOR REFERRAL TO SPECIAL EDUCATION

Developed by Henriette
Langdon (1980) for Dept. of
Sp. Ed., California Depart.
of Education

SCHOOL RECORD INFORMATION

1. Age (at times there may be discrepancies between information obtained from a parent's report and what is listed in the school record).
2. How long has the youngster been in school?
3. Have there been any learning problems?
4. Has school been attended regularly?
5. How long has the youngster been in the country?
6. Previous testing (if any) including educational and health.
7. Types of programs attended?
8. Previous teachers' comments.

TEACHER REFERRING CHILD

1. How does this child compare with other children who have similar backgrounds and experiences?
2. Does she/he have problems in learning/catching up with her/his group?

PARENT/GUARDIAN INTERVIEW

Gather data by talking directly to the parent/guardian (or via an interpreter if unfamiliar with the language).

1. Verify items checked in the cum record.
2. Obtain the parent's perception of the problem.
3. What does the child do at home? Does he/she perform as expected?
4. Is there a difference between this child and other siblings in any way regarding development, behavior, etc.?
5. More specific questions:
 - a. Did the youngster have difficulty in learning to talk?
 - b. Can he/she follow directions?
 - c. Can he/she comprehend what he/she is told?
 - d. Does he/she express her/himself with complete and grammatically correct sentences?
 - e. Does he/she express his/her ideas clearly?
 - f. Can he/she relate an experience or story in sequence?
 - g. Does he/she make articulation errors?
6. What is the youngster's motivation to know and learn in another language?
7. What is the parent/guardian's perception of education in general and school communication?